



Gut Health and Water Hydration

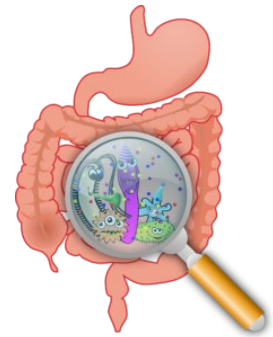
GUT HEALTH

A happy, healthy gut is important to your overall health. The **gut** is made up of the gastrointestinal (GI) tract and includes your stomach and your small and large intestines. The gut is responsible for digesting food, absorbing nutrients, and eliminating waste. Living within these organs and helping with these activities is a vast array of over a 1,000 different species of microorganisms. These organisms can weigh a whopping 3 to 5 pounds per person.

More than 10 trillion cells make up the human body. That may seem like a lot, but those cells are outnumbered 10 to 1 by tiny organisms called microbes! The most common microbe in the body is called bacteria. These teeny critters are made up of a single cell. They are so small that thousands could fit in the period at the end of this sentence.

The microorganisms in our gut help us in many ways. They:

- Improve our immune system: Microbes help to train our immune cells early in life to distinguish between helpful and harmful microorganisms.
- Help with nutrient absorption: When the stomach and small intestine are unable to digest certain foods we eat, our gut microbes jump in to offer a helping hand, ensuring we get the nutrients we need.
- Provide physical protection: Microbes secrete a protective mucus that lines the intestine to form a protective barrier. Other microbes then colonize this layer and exclude harmful bacteria from latching on. Finally, other microbes produce natural antibiotic compounds that can kill foreign microbes. Other microbes secrete an acidic compound that makes the gut less hospitable.
- Support function of the GI tract: Microbes contribute to the formation of new cells in the intestine. They also move food down the gut.



Maintaining the right diversity of microorganisms in your gut is important. Also, the mix of microorganisms in your gut can be impacted by diet, inflammation, illness, stress, and antibiotic use. Therefore, an imbalance in your gut can result in diarrhea, abdominal pains, and cramping.

So, what can you do to keep your gut in good condition? There are a couple of recommendations that are good for the general population. Good bacteria are supported by healthy, whole, plant-based foods high in fiber. Try including more plant-based, high fiber ingredients in your meals including whole grains, fruits, vegetables, and legumes.

- Eat more Prebiotic foods-that contain non-digestible dietary fibers and provide food for the “good” bacteria in the intestine. Some prebiotic fibers are oats, barley, wheat, apples, Jerusalem artichokes, chicory root, onion, jicama root, dandelion root, leeks, and asparagus; also some in bananas, milk, honey, maple syrup, and legumes.
- Eat more Probiotic foods-that contain “live” or “active cultures” of beneficial bacteria which survive the process of digestion, colonize in the gut, reproduce and attach to the wall of the intestine where they restore balance in the gut. Two specific probiotic species have been found to be very beneficial Lactobacillus and Bifidobacterium. There are many different types of bacteria that fall into these broad groups. Probiotics are naturally found in fermented food products like; yogurt, kefir, sauerkraut (unpasteurized), kimchi, kombucha, miso, tempeh, soft cheeses (Gouda and others), sourdough bread, and fermented vegetables in a water brine.

If you’re not willing to eat more of these foods, you can consider dietary supplements to get probiotics that come in powder, capsule, table, or packet form. It is important to note the beneficial effects are specific to particular probiotic strains. Also note, the risk of side effects is greater in people who have underlying health conditions, a compromised immune system, pregnant or nursing, or infection such as pancreatitis. Please consult your healthcare provider.

A direct connection between the digestive system and the immune system isn’t far-fetched; an estimated 70% of the immune system is located in and around the gut.

HYDRATION

We all know water is essential to everyday life! Staying properly hydrated is vital for a healthy lifestyle. How do we know if we drink enough water throughout the day? Are we really hydrated? Follow the information below to learn more about hydration, drink choices and tips to staying hydrated.

Water is essential!

We must remember there is no set amount of water that should be met by everyone to ensure you are properly hydrated. It is recommended men drink about 15.5 cups of water daily while women drink 11.5 cups of water daily, but that varies depending on health conditions, activity level, and even where you live. About 20% of our water intake comes from foods, so it is important to be consuming food that has high water content. Examples include celery, watermelon, green pepper and oranges. Not only does water provide us with proper hydration, it also helps get rid of waste, regulates temperature, lubricates and cushions joints and protects sensitive tissues.



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Tips to Drinking more Water

- Try water infused with fruit. Lime, orange, cucumber or lemon slices.
- Have a water bottle next to your desk to remind you to drink.
- Have a glass of water before a meal, bed or when you wake up.
- Use an app to track the amount of water you drink.
- Set a timer to remind you to drink water.



Signs of Dehydration

Dehydration occurs when you lose more fluid than you are taking in. Your body then doesn't have enough water to help with everyday functions that are necessary to a healthy lifestyle. Being dehydrated is very dangerous in younger and older adults. A few symptoms of dehydration include:

- Extreme Thirst
- Dark colored urine
- Confusion
- Dizziness
- Fatigue
- Less frequent urination
- Dry mouth

If you are experiencing any of these symptoms it is important to focus on drinking water and getting rehydrated. Slowly drink water until you are feeling better. If you have been experiencing vomiting or diarrhea for more than 24 hours, it is important that you visit your local doctor to take action.

Additional Resources:

- <https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/water/art-20044256>
- <https://livesmartcolorado.colostate.edu/?s=water>
- <https://www.mayoclinic.org/diseases-conditions/dehydration/symptoms-causes/syc-20354086>
- [Happy, Healthy Gut, Happy You - Live Smart Colorado \(colostate.edu\) OCTOBER 3,2019 L. Christiansen](#)
- <https://foodsmartcolorado.colostate.edu/.../gut-health> J. Clifford and T. Weir





AHW Lesson Activities

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“Applying the Lesson”

Choose one of the following activities to apply what you learned about your health and your healthy goal setting. Write a short response (3 to 5 sentences) to describe what you did and learned from the activity selected. Report your Applying the Lesson results by Online form, email, fax or hard copy to your county Extension Office.

Option 1: If you fall short of drinking enough water, start keeping track and use some of the tips or ideas of your own to add water into your day. What changes do you notice from drinking more water? What were the challenges of consuming more water? What are some ideas to help you overcome those challenges?

Option 2: Look at your total body water information on your Inbody scan. Reflect on this information. Does it surprise you that your body is made up of this much water? Are you around the 60% of your body is made up of water?

Option 3: Explore Gut Health: If this topic hits you “in the gut” and you want to learn more, read one or more of these articles to find out more about this topic; or find your own source of creditable information.

- *Your Gut Can Make You Slim* <http://www.health.com/health/article/0,,20859953,00.html>
- *Gut Health and Immunity-It's All about the Good Bacteria That Can Help Fight Disease* <http://www.todaysdietitian.com/newarchives/060112p58.shtml>
- *Seven Foods to Supercharge Your Gut Bacteria* <http://www.pcrm.org/media/online/sept2014/seven-foods-to-supercharge-your-gut-bacteria>

How can you use this information to your benefit? What changes will you consider as a result of knowing more about Gut Health?